

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Mahoney Environmental Services

Chicago Manufacturing Center

Lean Thinking Supports New Business Venture for Mahoney Environmental

Client Profile:

Mahoney Environmental Services, founded in 1953 to collect spent fryer oil from restaurants, has grown into a licensed EPA recycler that collects and disposes of meat, scraps and grease as well as oil. Based in Rockdale, Illinois, Mahoney also has a state-of-the-art processing plant in Mendota, Illinois. The company employs 100 people and serves customers in a three-state area.

Situation:

In August 2002, John Mahoney, owner of Mahoney Environmental Services, took his company in a new direction, launching the Direct-Connection® Recycler System, a series of tanks and parts kits for used oil. Mahoney's patented system pumps the used hot oil directly from the fryer to the Direct-Connection recycler. This system not only improves worker safety by reducing the risk of spills and burns, but also increases the recycling value of the spent oil. In bringing Direct-Connection to the marketplace, Mahoney became two companies in one: a service company and a manufacturing company. Having developed an innovative solution, Mahoney now had to get a handle on production. The company soon realized that it was not prepared to ramp up production to meet projected sales growth. Management took stock of the situation and set several key goals for the Direct Connection unit: 1) Reduce the number of individual parts, volume of each part and various locations for parts; 2) Clean/organize warehouse for floor space, shelf space and visibility; 3) Organize part and subassembly locations to improve productivity of internal customers and users; 4) Organize the part and subassembly locations to improve productivity of internal customers and users; 5) Clean and organize the warehouse to increase floor and shelf space and improve visibility; 6) Create a cost effective model for make versus buy decisions for parts and supplies; 7) Standardize processes and procedures to improve communication between Direct Connection and the rest of the company; and 8) Establish performance expectations for Direct Connection and create metrics to track progress. Mahoney brought its production challenges to the Chicago Manufacturing Center (CMC), a NIST MEP network affiliate.

Solution:

CMC's lean consultant, Walter O'Dowd, began the project with a Value Stream Map, then helped Direct Connection's team tackle each goal with a variety of lean tools -- kaizens, 5S, visual workplace and kanbans -- to great success. For example, adopting Lean thinking helped Pete Iovinelli, Supply Chain Manager for Direct Connection, negotiate with a tank supplier to deliver smaller loads every two to three weeks instead of single trailer loads that built up inventory. O'Dowd also helped Mahoney set new metrics keyed to the successes of the company's lean journey. These include inventory value, inventory turns, tank inventory cycle count activity, tank and kit inventory levels, and on-time delivery. "That's huge," said owner John Mahoney. "Everyone used the same language but it meant different things. Walt helped create a common language and defused emotions and conflicts."

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Results:

- * Realized \$40,000 in cost savings.
- * Avoided \$30,000 in costs.
- * Invested \$20,000 in workforce development.
- * Reduced inventory by 62 percent.
- * Increased inventory turns from 5 percent to 13 percent.
- * Reduced labor hours by 5 percent, saving 27 worker hours on 2,680 kits per year.
- * Increased floor space in tank assembly area by 100 percent.
- * Increased floor space for tank storage by 300 square feet.

Testimonial:

"Walt O'Dowd, Chicago Manufacturing Center's advisor, learns your business and moves up through it so he builds connections with the hands-on people. He's different from most consultants. He really connects at all levels. He's open and shares techniques."

John Mahoney, Owner